

Contributing to the Conservation Geoportal

**Society for Conservation GIS and
Society for Conservation Biology
Integrated Conference 2006**

Lecture and Exercise

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LECTURES

What is the Conservation GeoPortal?

- The Conservation GeoPortal is a collaborative effort by and for the conservation community to facilitate the discovery and publishing of geographic information systems (GIS) data and maps, to support conservation decision-making and education.
- The Conservation GeoPortal is intended support the principles and objectives of the Conservation Commons.
 - it only includes metadata for resources distributed under those principles.
 - Data publishers are encouraged to provide their data and maps under public domain licenses so that others may freely use them.

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What is the Conservation GeoPortal?

- With the Conservation GeoPortal you can:
 - Share geospatial information with others
 - Quickly access key geospatial information resources
 - Search for data and maps by keyword, category, geography, or time period
 - Save your search queries for future use
 - Use the built-in Map Viewer to display, manipulate, and combine live map services
 - Create, save, and email custom maps using data from various map services
 - Publish metadata for your maps and data so others can find them



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Functions of the Conservation GeoPortal

Home page



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Functions of the Conservation GeoPortal

Advanced Search page



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Functions of the Conservation GeoPortal

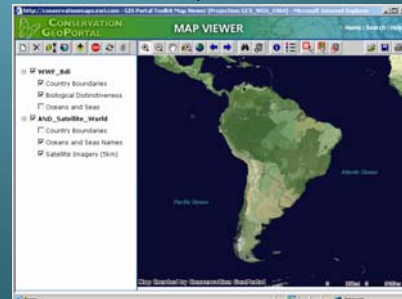
Manage Data Descriptions



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Functions of the Conservation GeoPortal

Map Viewer



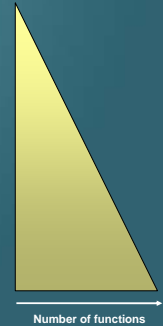
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How can I participate in the Conservation GeoPortal?

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How can I participate?

- Users of the GeoPortal
 - Anonymous User (**No login required**)
 - Search catalog, view results and view maps
 - Registered User
 - Save searches and save maps
 - Publisher
 - Create metadata, upload metadata, update and delete metadata, download metadata
 - Channel Steward
 - Manage content of assigned channels
 - GeoPortal Administrator
 - Approve metadata, create publisher accounts, batch load metadata



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How can I participate?

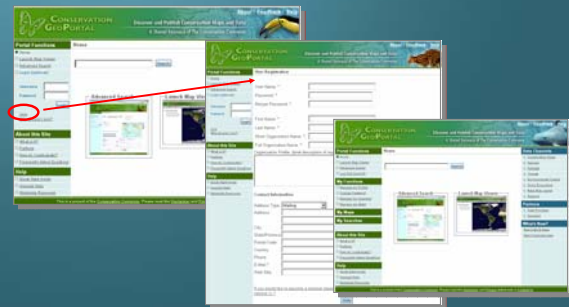
Everybody can participate!!!

- Create a user account
- Send email if you want to publish (meta)data
- Create metadata for your data/applications/maps
- Publish the metadata
- Maintain data and metadata
- Manage a channel (optional)

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How can I participate

- Creating an account (Registered user)



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How can I participate?

- Publisher and Steward
 - Send an email to the site administrator with a request that you want to become a publisher or steward

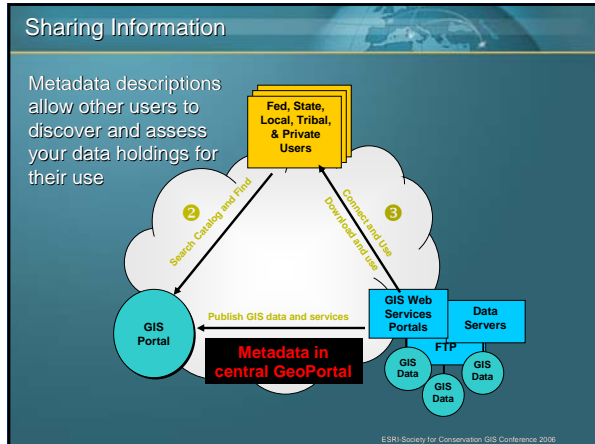


- If you have an account, include your user name
- If you do not have an account, provide contact information

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How can I share my information?

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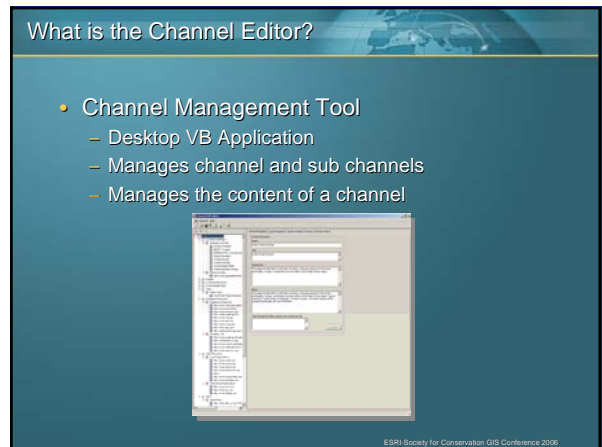
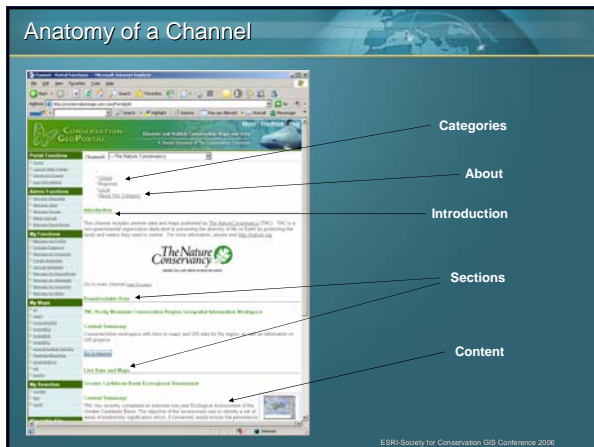
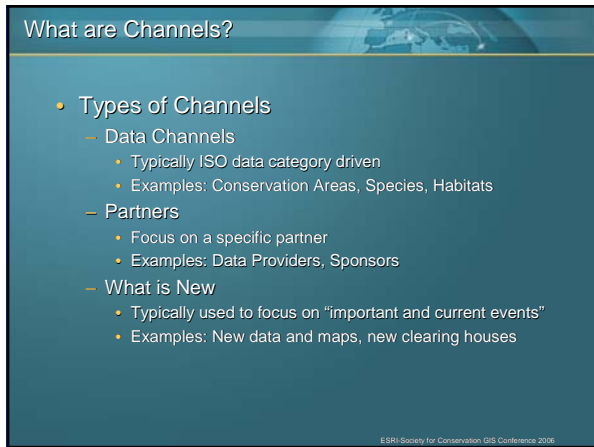
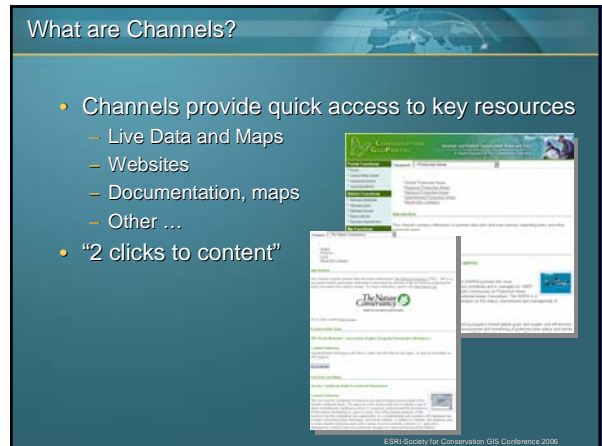
- ### Sharing Information
- Metadata
 - Needs to have a common format
 - XML
 - Needs to follow some standards
 - Use FGDC or ISO (19115)
 - Describe the various aspects of the data
 - Title
 - Abstract
 - Owner/Publisher
 - Geographic Location covered by your data
 - Type of data (Live Data, Downloadable, Static Image, etc)
 - Data category (Base Map, Conservation, Agriculture)
 - Keywords (use general and specific keywords)
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- ### Sharing Information
- Use Publisher functions:
 - Create metadata
 - Upload metadata
 - Manage my repositories
 - Manage my metadata
 - Manage metadata access
-
- Three screenshots of the publisher interface are shown. The first shows the 'Manage My Metadata' page with various options. The second shows a 'Manage My Metadata' page with a list of metadata records. The third shows a 'Manage My Metadata' page with a 'Manage My Metadata' button.
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- ### Sharing Information – Creating Metadata
- Select standard
 - Select content type
 - Complete online form
 - Abstract
 - Keywords
 - Contact Information
 - WMS, WFS, WCS GetCapabilities
 - Title
 - Bounding box
 - Abstract
-
- A screenshot of the metadata creation form is shown. It includes fields for 'Dataset title', 'Owner', 'Dataset UUID', and 'Date range between'. There are also sections for 'Abstract', 'Keywords', and 'Contact Information'. A 'SUBMIT' button is visible at the bottom.
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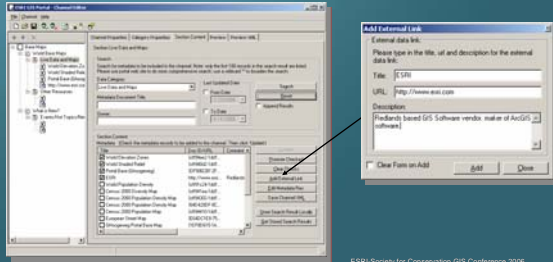
- ### Publisher Functions
- Upload Metadata
-
- A screenshot of the metadata upload interface is shown. It includes a 'Upload Metadata' button and a 'Manage My Metadata' button. There is also a 'Manage My Metadata' button with a dropdown menu.
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- ### Publisher Functions
- Manage my Metadata
-
- A screenshot of the metadata management interface is shown. It includes a 'Manage My Metadata' section with a table of records. The table has columns for 'Action', 'Dataset ID', 'Title', 'Owner', 'Folder', 'Update Date', and 'Status'. There are also buttons for 'View', 'Edit', 'Delete', 'Download', and 'Check Onlink'.
- | Action | Dataset ID | Title | Owner | Folder | Update Date | Status |
|--------|----------------------------------|---|-------|-----------------------|-------------|----------|
| [View] | 0792892-1d81-481a-887e-084d-0d64 | Agricultural Threat to Africa | gerco | World Elevation Zones | 04-04-2006 | Approved |
| [View] | 0792892-1d81-481a-887e-084d-0d64 | Agricultural Threats to Central America and Caribbean | gerco | World Elevation Zones | 04-04-2006 | Approved |
| [View] | 0792892-1d81-481a-887e-084d-0d64 | Agricultural Threats to South America | gerco | World Elevation Zones | 04-04-2006 | Approved |
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What is the channel editor?

- Managing content
 - Query database (GeoPortal)
 - Reference external sites/file/maps/databases



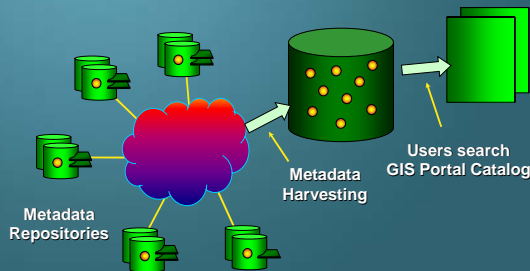
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Can I interact with other data repositories?

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Getting Information from other repositories

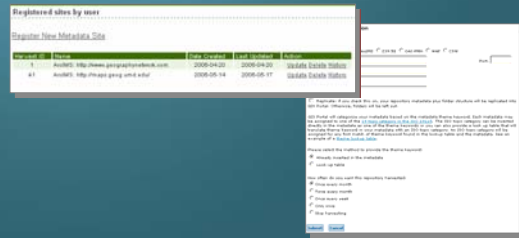
"Harvest" data description



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Harvesting Tool (Publisher)

- Register Repository
 - Manage my Metadata
 - Repository Information



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Harvesting Tool (Administrator)

View registered sites for all users

#	Name	Date Created	Last Updated	Owner Name	Action
1	ArcIMS: http://www.geographynetwork.com	2006-04-03	2006-04-03	genico	Update Site's Status
2	WAF: http://phosgene.waf	2006-04-03	2006-04-03	genico	Update Site's Status

View harvest history for each site

Date	# Harvested	# Validated	# Published	Detailed Report
1. 2006-04-04	25	0	25	View Reports
2. 2006-04-04	0	0	0	View Reports

When do you harvest a site?

- Within a few days of the site being registered
- Repeat the at the frequency requested by the site

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Other Workshops

- Building your Own GeoPortal

- Daily 12:00 – 1:30 pm
 - Salon III in the Marriott Hotel
- Daily 9:30 – 10:00 and 4:00 – 4:30 pm
 - GIS Technology Demo Theater

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Exercise

- Search for data
- Create and save a map
- Sign up as a registered user
- Publish “data descriptions”
- Manage your “data descriptions”

EXERCISE

Exercise

This exercise will introduce users to the Conservation GeoPortal and addresses the following topics:

1. Data Discovery
2. Working With Maps
3. Creating an Account
4. Publishing Metadata
5. Managing Your Metadata
6. Registering Repositories

Data Discovery

In the first part of this step, you will conduct a simple keyword search to find metadata records.

- Open an Internet browser.
- Enter the URL to the Conservation GeoPortal: <http://conservationmaps.esri.com/Portal>.
- On the homepage enter the keyword "imagery" and click on Search.
- For one of the returned records, click on the "View Details" button to open summary level metadata for that record.
- Click the "View All Metadata" button at the end of the record. This will open the full metadata record for your review.
- Close the full metadata record.
- Return to the search results by clicking on the Back button of your browser.

In the next part of this exercise, you will use the advanced search option to search for datasets that you can view in the map viewer. These datasets are categorized as "Live Data and Maps".

- In the table of contents, click on the "Advanced Search Link".
- Clear any entries from the keyword field.
- Use the map to zoom to the extent of South America.
- Set the Type/Format to Live Data and Maps.
- Click the Search button.

- For one of the records, click on the View details button to open the metadata summary.
- Click on the "View Map" button to open the map in the map viewer that is part of the Conservation GeoPortal.



DO NOT click on the "View Globe" button. This function is not available in the classroom.

- Leave the map viewer open and return to the search results.
- Select another record to add to the map viewer.

You now have added two "Live Data and Map" services hosted by two different organizations and combined them in a single map. In the next step, you will work with these map services.


Working with Maps

In this part of the exercise, you will learn how to add mapping services to the Map Viewer and how to organize the Table of Contents.

- Click the Add Services button.
- From the List of Services, select Geography Network.
- Click OK.
- Select WWF_Threat.
- Click Add.
- Click Close.
- Click the Move Services button .
- Move WWF_Threat to the bottom of the list.
- Click REFRESH MAP.
- Click CANCEL.
- Click the Set transparency button .
- Set the transparency for one of the other map services to 30 percent.
- Click Close.
- Refresh the map.

Changing the Map Projection

In this step, you will learn how to change the default map projection of the base map.

- Open the Map Viewer (if not already open).
- Zoom to Alaska.
- Click the Edit Properties button .
- Change the projection to 102006 Alaska Albers Equal Area Conic.
- Click APPLY.

With this projection, you will notice that you have a much better understanding of Alaska's geography than with the WGS84 geographic projection. You can use this option to set the default map projection to your local projection system.

Creating an Account

In this step you will learn how to create your own account as a registered user.

- Return to the Conservation GeoPortal home page.
- Click on the link "Join" to open the user registration page.
- Fill in all the fields, including those fields that are not required. Information in these fields can be used later on when you become a publisher and need to enter your contact information as part of the online metadata creation form.
- Click the Join button. You will notice that you have a new set of tools in the Table of Contents and that you are automatically logged in.

Now that you are a registered user, you can save searches and maps. To save a map,

- Go to the Map Viewer

Saving Maps

In the next steps, you will be saving the map in different formats. This provides you with an understanding of how you can share maps with other users and retrieve maps for your own use later.

- Click the Save Map button.

- On the SAVE dialog box, select Save Map.
- Click Save.
- Type the following name for this map: "Biodiversity".
- Click SAVE, and then CLOSE the MESSAGE.
- Refresh the GIS Portal home page.
- Under Saved Map, the Earthquakes map should be visible.
- Click the Save Map button in the Map Viewer.
- Select Create Map Link and click SAVE.
- Copy the map URL to the clipboard and click CLOSE.
- Close the Map Viewer.
- Open a new Web browser window.
- Paste the URL in the Address bar of the browser and click enter.
- Click the link to open the URL.

The Map Viewer will open with the same map you just created. The Link Map allows you to easily and quickly share specific maps with many other users. Close the Map Viewer and the browser displaying the map link.

- Open your saved map from the Conservation GeoPortal home page My Maps link.
- Click the Save Map button in the Map Viewer.
- Select Save as Web Map Context and click SAVE. The extension of your file will be cml.

The WMC files can be opens with the GIS Portal Toolbar for ArcMap and combine remote information with local data sources.

Publishing Metadata

Metadata fuels the Conservation GeoPortal and it is a critical part in sharing information between GIS users. To publish metadata you first must become a publisher or request the site administrator to provide you with an account.

- Login with your publisher account.
- Click on the link "create metadata".
- Select Standard = ISO.
- Select content/type = static map file.
- Click on proceed.
- Fill in the required fields in the online form. Notice that your contact information is automatically entered. This information is retrieved from your user profile. When you reach the keyword section, you have an option to use a thesaurus to select/add keywords. To use the thesaurus:
 - Select the thesaurus name
 - Select any of the keywords that you want
 - Click on Accept to add the keywords to the keyword list
- Complete the form.

Managing Your Metadata

The documents just created and uploaded appear with a status set to Posted. This means that only you and the administrator can see the document. The GIS Portal administrator will need to review the metadata and mark it as reviewed or approved before this document can be found by users of the GIS Portal search facility.

- Click Manage my Metadata.
- A list of three metadata documents is now visible.
- Rest the mouse pointer on the five yellow buttons to the left of the metadata document and write down what these buttons do.

1. _____
2. _____
3. _____
4. _____
5. _____

- Select one of your records by checking its check box.
- Click the Download button and save this document (use the Save to Disk option and click OK). You can use this download option to import metadata with shapefiles or other GIS datasets.

- Select a record.
- Click the Update button.
- Fill in the required fields and resubmit the document.
- Select the record again.
- Click the View button. This will display the full metadata record. Close the window after reviewing the data.

Registering Repositories

In this step, you will learn how to add existing metadata repositories to the portal data for harvesting.

- Click the Manage my Repositories link.
- Click the Register New Metadata Site link.

You will be registering the metadata service (Browse_Metadata) that is managed on the Geography Network at <http://www.geographynetwork.com>.

- Select the ArcIMS protocol.
- Enter the URL.
- Enter the metadata service name.
- Your repository will be harvested twice a month.
- Click the submit button.

EXERCISE END